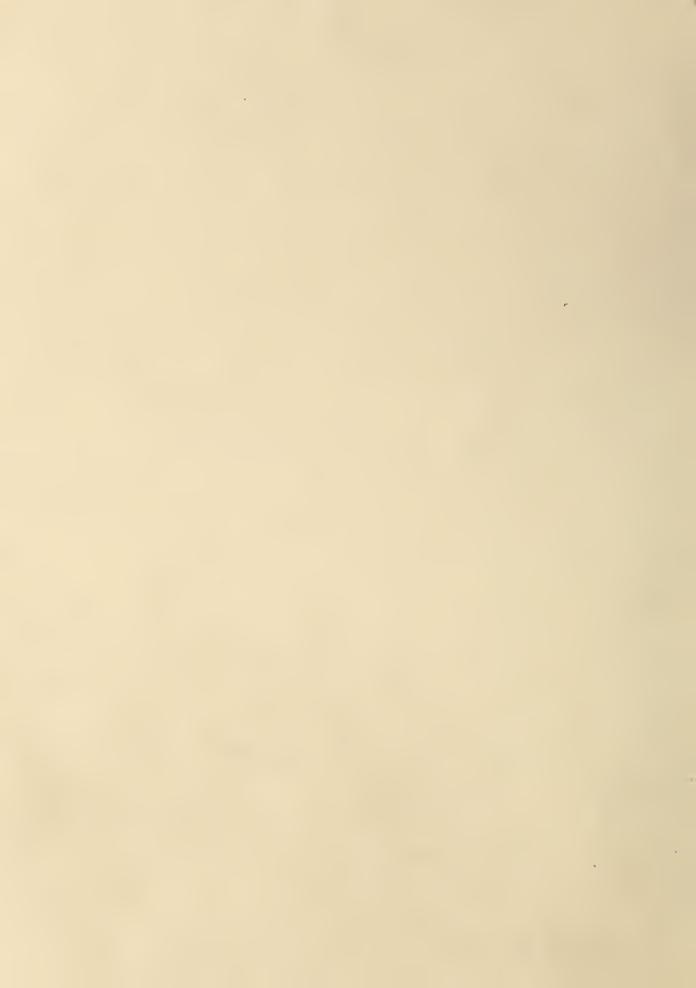
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.





PROCUREMENT SECTION
CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT OF AGRICULTURE * SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION STATE ENGINEER of COLORADO and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.



TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources, Parliament Building, Victoria, British Columbia

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

M. D. BURDICK

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE DENVER, COLORADO MARION E. STRONG

STATE CONSERVATIONIST SOIL CONSERVATION SERVICE ALBUQUERQUE, NEW MEXICO

In Cooperation with

JOHN PATRICK JORDAN

DIRECTOR
C S U
EXPERIMENT STATION

S. E. REYNOLDS

STATE ENGINEER STATE OF NEW MEXICO C. J. KUIPER

STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor and

RONALD E. MORELAND, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompangre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

March 1, 1973





GENERALLY ADEQUATE 100% OR MORE



LIMITED SHORTAGE 75% - 100%



SEVERE SHORTAGE 75% OR LESS



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

March 1, 1973

SNOWFALL DURING FEBRUARY WAS CONSIDERABLY LESS THAN NORMAL. DESPITE THE BELOW AVERAGE MONTH THE SNOWPACK IS NEAR NORMAL OR ABOVE IN BOTH STATES. NORTHERN NEW MEXICO AND SOUTHERN COLORADO HAVE THE BEST SNOWPACK. SOIL MOISTURE CONDITIONS ARE GOOD IN BOTH STATES. CARRY-OVER STORAGE IS RELATIVELY GOOD. MORE SNOW IS NEEDED TO ASSURE ADEQUATE WATER THIS SUMMER.

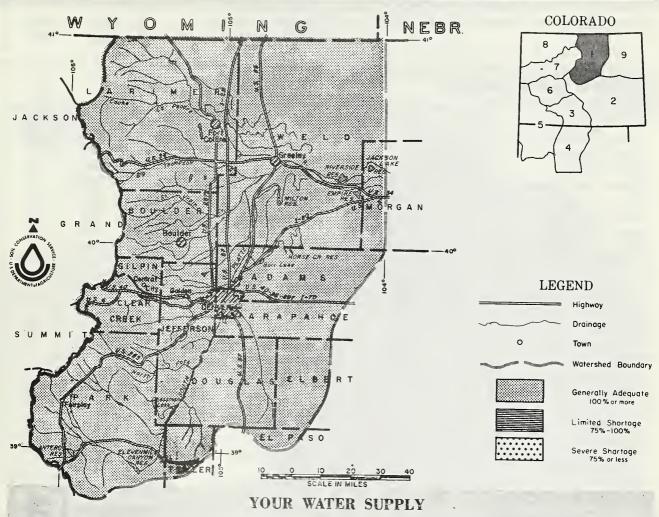
STATE DUE TO THE POOR SNOWFALL DURING FEBRUARY. LAST MONTH SNOW WAS ONLY ABOUT 25 PERCENT OF THE 15 YEAR AVERAGE IN SOME AREAS. WATER SUPPLIES SHOULD STILL BE NEARLY ADEQUATE IF SNOWFALL DURING THE REMAINDER OF THE YEAR IS AT LEAST AVERAGE. THE ARKANSAS DRAINAGE HAS ONLY 92 PERCENT OF AVERAGE SNOWPACK AND POOR CARRY-OVER STORAGE. SOIL MOISTURE IS REPORTED AS GOOD OVER THE STATE.

NEW MEXICO THE SNOWFALL DURING FEBRUARY WAS LESS THAN NORMAL,
BUT THE EARLY SNOWS STILL BRING THE SNOWPACK ABOVE NORMAL.
FORECASTS WERE LOWERED SLIGHTLY. IF SUBSEQUENT SNOWFALL IS ABOVE
NORMAL, STREAMFLOWS SHOULD BE ADEQUATE FOR THE FIRST TIME IN SEVERAL YEARS.
FALL PRECIPITATION ADDED NEEDED MOISTURE TO THE IRRIGATED VALLEYS AND INCREASED
STORAGE IN SOME RESERVOIRS.

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of March 1, 1973

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOWPACK ON THE SOUTH PLATTE DRAINAGE WAS CONSIDERABLY BELOW NORMAL DURING FEBRUARY. IN A FEW CASES WE HAVE LESS SNOW NOW THAN FEBRUARY 1. WATER SUPPLY FORECASTS WERE LOWERED PROPORTIONATELY. SUPPLIES SHOULD STILL BE GOOD IF WE HAVE NORMAL SNOWFALL FOR THE REMAINDER OF THE YEAR. SOIL MOISTURE CONDITIONS IN THE MOUNTAINS IS NEAR NORMAL. SOIL MOISTURE IN THE IRRIGATED AREAS ARE REPORTED TO BE GOOD. RESERVOIR CARRY-OVER STORAGE IS SLIGHTLY LESS THAN LAST YEAR, BUT IS STILL 125 PERCENT OF 1953-67 AVERAGE.

This report prepared by

JACK N. WASHICHEK and RONALO E. MORELANO
.SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
OENVER, COLORADO

M. O. BURDICK.-STATE CONSERVATIONIST

JACK L. HALL--AREA CONSERVATIONIST

J. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

OENVER, COLORADO

OENVER, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Ann-Sent. WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-

STREAM EUT TOREGROTO (1000 A	0. 1	Apr -	WAILE OUT LI OUTLOOK CENE	mt with Kespeci	to Usual Supply.	
	FORE-	% of	+		Flow F	eriod
FORECAST POINT	CAST	Average	Average	STREAM or AREA	Spring Season	Late Season
Big Thompson at Drake (1) Boulder at Orodell Cache La Poudre at Canyon Mouth (2) Clear Cr. at Golden (3) Saint Vrain at Lyons(4)	95 48 210 115 65	95 98 97 97 93	100 49 215 119 70	Bear Creek Coal Creek North Fork of South Platte North Fork of Cache La Poudre Ralston Creek Rock Creek	Avg Avg Avg Avg Avg Avg	Avg Avg Avg Avg Avg
(1) (1)	40.1.01		1			101 10

(1) Observed flow plus by—pass to power plants. (2) Observed flow minus trans—basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY OF SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

SOIL MOISTURE

RIVER BASIN and/or	Number of Courses	THIS YE	AR'S SNOW PERCENT OF
SUB-WATERSHED	Averaged	Last Year	Average +
Big Thompson	5	83	94
Boulder	3	76	86
Cache La Poudre	8	97	108
Clear Creek	5	86	78
Saint Vrain	3	74	85
South Platte	3	85	93

JULE INDIGIONE					
RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:			
	Stations	Last Year	Average +		
Big Thompson	3	93	102		
Boulder	1	88	84		
Cache La Poudre	2	102	93		
Clear Creek	2	125	100		
Saint Vrain	2	94	89		
South Platte	2	126	117		

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

WESERADIK SIGNAGE (Housaila	NU. 11./	ENDOF	PONTH
RESERVOIR	Usable	U	sable Stora	ge
RESERVOIR	Capacity	This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	26.5	24.0	18.9
Black Hollow	8.0	4.4	4.2	3.3
Boyd Lake	44.0	37.5	36.1	27.8
Cache La Poudre	9.5	7.8	7.7	7.0
Carter Lake	108.9	98.4	97.5	71.3
Chambers Lake	8.8	4.4	1.6	2.7
Cheesman	79.0	41.4	79.1	46.4
Cobb Lake	34.0	21.0	20.5	9.9
Eleven Mile	97.8	90.9	73.5	72.0
Fossil Creek	11.6	8.8	8.8	6.1
Gross	43.1	24.0	28.9	24.0

RESERVOIR STORAGE (Thousand	Ac.	Ft.)	END OF MONTH
-----------------------------	-----	------	--------------

_	RESERVUIR STURAGE (INDUSAND AC. FT.) END OF MONTH										
	RESERVOIR	Usable	Usable Storage								
†	RESERVOIR	Capacity	This Year	Last Year	Average						
7	Halligan	6.4	5.1	5.6	3.8						
)	Horsetooth	143.5	103.5	106.5	93.6						
3	Lake Loveland	14.3	8.7	12.2	8.1						
3	Lone Tree	9.2	8.5	7.9	6.2						
	Mariano	5.4	5.1	5.3	3.9						
3	Marshall	10.3	3.5	6.1	2.5						
7	Marston	18.0	14.5	14.8	14.3						
ŀ	Milton	24.4	13.3	15.9	9.5						
)	Standley	42.0	20.5	24.3	9.8						
	Terry Lake	8.2	5.8	5.7	4.9						
	Union	12.7	10.4	12.1	7.5						
)	Windsor	18.6	12.7	13.183	-1967 griod.						

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE

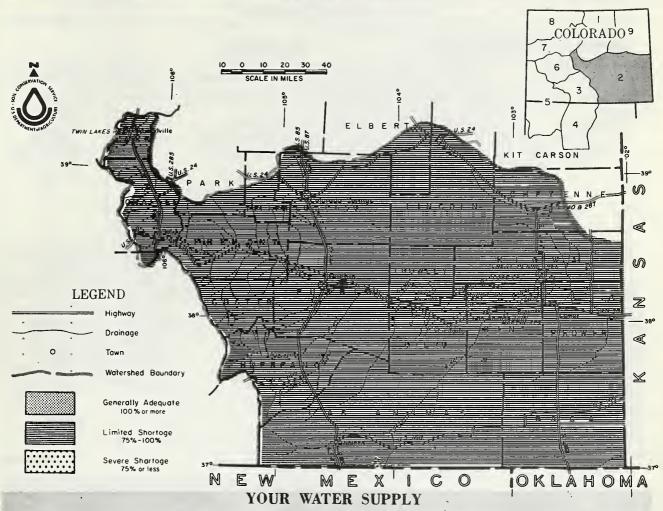


FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of March 1, 1973

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



SNOWFALL DURING FEBRUARY WAS BELOW AVERAGE AND STREAMFLOW FORECASTS HAVE BEEN REDUCED ACCORDINGLY. FORECASTS FOR THE APRIL THROUGH SEPTEMBER PERIOD RANGE FROM 90 TO 97 PERCENT OF THE 1953-67 AVERAGE. RESERVOIR STORAGE IS ONLY 80 PERCENT OF AVERAGE EXCLUDING JOHN MARTIN AND TURQUOISE RESERVOIRS, WHICH HAVE 17,000 AND 49,000 ACRE FEET RESPECTIVELY. THIS IS ABOUT 80 PERCENT OF LAST YEAR. ABOVE AVERAGE SNOWFALL IS NEEDED TO INSURE ADEQUATE WATER SUPPLIES THIS SUMMER.

JACK N. WASHICHEK and RONALO E, MORELANO SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE OENVER, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept WATER SUPPLY DUTI ONK Expressed as "Poor, Fair, Average, Ex-

FORECAST BOINT	FORE-	RE- % of A +		Flow P	Flow Period		
FORECAST POINT	CAST	Average	Average	STREAM or AREA	Spring Season	Late Season	
Arkansas nr Pueblo (1) Arkansas at Salida (1) Cucharas nr LaVeta Purgatoire at Trinidad	290 300 11 40	97 97 92 90	298 309 12 46	Apishapa Fountain Creek Grape Hardscrable Creek Huerfano Monument Creek	Avg Avg Avg Avg Avg	Fair Fair Fair Fair Fair	

SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF			
SUB-WATERSHED	Averaged	Last Year	Average +		
Arkansas Cucharas and	10	89	92		
Purgatoire	3	100	100		

SOIL MOISTURE

RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:			
	Stations	Last Year	Average +		
Arkansas Cucharas and	3	134	110		
Purgatoire	1	97	96		

RESERVOIR STORAGE (Thousand Ac Et) and

RECERVALD STARAGE (Thousand &c Ft)

NESERVUIR STURMUE (IIUu3aiiu	AG. 11.7	END OF	MONTH	VESCUANTY SIONAGE (nousanu i	46. IL.)	END OF M	IONTH
BECERVOIR	Usable Usable Storage		DESERVOIR Usable		Usable Storage				
RESERVOIR	Capacity	This Year	Last Year	Average	RESERVOIR	Capacity	This Year	Last Year	Average +
Adobe Clear Creek Cucharas Great Plains Horse Creek	61.6 11.4 40.0 150.0 26.9	0.0 5.7 0.0 25.2 0.0	13.5 6.2 0.0 42.0 0.0	. 1	John Martin Meredith Model Turquoise Twin Lakes	353.9 41.9 15.0 130.0 57.9	17.1 22.5 48.9 25.5	22.6 8.5 1.0 58.7 30.8	85.1 9.0 3.1 7.0 20.1
								+ 1053	-1967 period

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE

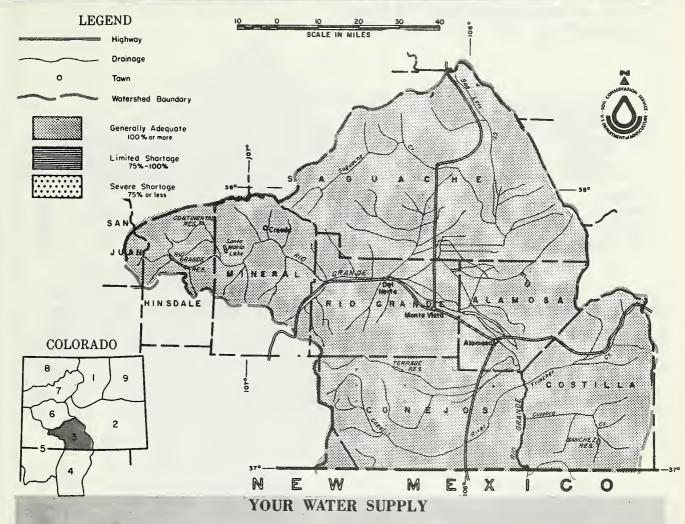


FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO

as of March 1, 1973

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



WATER SUPPLY FORECASTS ARE ABOVE AVERAGE IN ALL TRIBUTARIES OF THE RIO GRANDE.
HOWEVER, SNOWFALL DURING FEBRUARY WAS BELOW AVERAGE. IF AVERAGE SNOWFALL
CONTINUES DURING THE REMAINDER OF THE SEASON WATER SUPPLIES SHOULD BE
ADEQUATE. RESERVOIR STORAGE IS 98 PERCENT OF THE 1953-67 AVERAGE AND SOIL
MOISTURE CONDITIONS IN THE MOUNTAIN AREAS ARE NEAR AVERAGE.

This report prepared by

JACK N. WASHICHEK and RONALO E. MURELANO
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE

DENVER, COLORADO

M. D. BURDICK.—STATE CONSERVATIONIST

V. S. DEPARTMENT OF A GRICULTURE - SOIL CONSERVATION SERVICE

OENVER, COLORADO

DURANGO, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sent WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-

	FORE-	% of	+		Flow F	Period
FORECAST POINT	CAST			STREAM or AREA	Spring Season	Late Season
Alamosa abv Terrace Conejos nr Mogote (1) Culebra at San Luis (2) Rio Gr. at 30 Mile Bridge (3) Rio Gr. nr Del Norte(3) So. Fork at So. Fork	80 225 19 140 500 135	129 124 100 120 114 123	62 182 19 117 438	Saguache Creek Sangre de Cristo Cr. Trinchera Creek	Exc Exc Exc	Exc Exc Éxc
(11 Observed flow plus change in storage in Pl						

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sancistorage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

SOI	L M	OIS	TU	RE

RIVER BASIN and/or	Number of Courses		AR'S SNOW PERCENT OF	RIVER BASIN	Number		S MOISTURE CENT OF:
SUB-WATERSHED	Averaged	Last Year	Average +		Stations	Last Year	Average 1
Alamosa Conejos Culebra Rio Grande	2 3 2 10	169 161 95 117	154 123 110 127	Alamosa Conejos Culebra Rio Grande	1 1 2 2	92 92 96 108	84 84 90 100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable		sable Stora	ge	RESERVOIR	Usable		sable Stora	ge
	Capacity	This Year	Last Year	Average †		Capacity	This Year	Last Year_	Average †
Continental Platoro Rio Grande	26.7 60.0 45.8	4.8 2.9 18.4	5.8 2.9 16.2	4.4 7.1 12.0	Sanchez Santa Maria Terrace	103.2 45.0 17.7	5.9 4.8 5.7	10.0 6.4 6.0	10.6 5.5 3.7
	•	·	•	•	•			° + 1953	-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE



FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of March 1, 1973

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



CONTINUES AT LEAST AT A NORMAL RATE, WATER SUPPLIES SHOULD BE GENERALLY
ADEQUATE. CARRY-OVER STORAGE IS GOOD DUE TO THE FALL RAINS. SOIL MOISTURE IS
REPORTED TO BE EXCELLENT.

This report prepared by

JACK N. WASHICHEK and RONALO E. MORELAND

SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE

OENVER, COLORADO

MARION E. STRONG:—STATE CONSERVATIONIST

U. S. DEPARTMENT OF A GRICULTURE - SOIL CONSERVATION SERVICE

ALBUQUERQUE, NEW MEXICO

SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul WATER SUPPLY NILTINOK Expressed as "Poor, Fair, Average, Ex-

SOREGIST POWT		% of	+		Flow Period	
FORECAST POINT	FORE- CAST	Average	Average	STREAM or AREA	Spring Season	Late Season
Costilla at Cost. (1) Pecos at Pecos Rio Chama to El Vado Rio Gr. at Otowi (2) Rio Gr. at San Mar (2) Rio Hondo nr Valdez Red R. at mouth nr Questa	23 52 230 600 420 17 40	128 127 122 117 126 113 125	18 41 188 513 334 15 32	Embudo Creek Jemez River Mora River Nambe Creek Rio Ojo Caliante Rio Pueblo de Taos Santa Fe Creek	Exc Exc Exc Exc Exc Exc Exc	Avg Avg Avg Avg Avg Avg

The forecost of the Rio Gronde ot Son Morcial is 55% of the Averoge used by the Elephont Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

RIVER BASIN	Number of		R'S SNOW
and/or	Courses		PERCENT OF
SUB-WATERSHED	Averaged	Last Year	Average +
Pecos	1	410	180
Rio Chama	4	214	119
Rio Grande, NM	12	190	137
Rio Hondo	1	185	
Red River	2	148	138

SOIL MOISTURE

RIVER BASIN	Number	THIS YEAR'S MOISTURE as PERCENT OF:		
	Stations	Last Year	Average	
Pecos Rio Chama Rio Grande Red River	2 1 2 1	76 170 110 63	88 170 123 79	

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable	υ	sable Stora	ge
RESERVOIR	Capacity	This Year	Last Year	Average
Alamorgordo Caballo Conchas Elephant Butte	111 344 273 2195	87 73 143 382	52 17 79 223	76 81 163 370

RESERVOIR STORAGE (Thousand Ac.)	tt.)	END OF MONTH
-----------------------------------	------	--------------

WESEKANIK SINKARE (II	ivusaiiu i	46. FL.)	END OF M	IONTH		
255501010	Usable	U	Usable Storage			
RESERVOIR	Capacity	This Year	Last Year	Average		
El Vado McMillen-Avalon	195 32	23 33	1 13	4 20		

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE

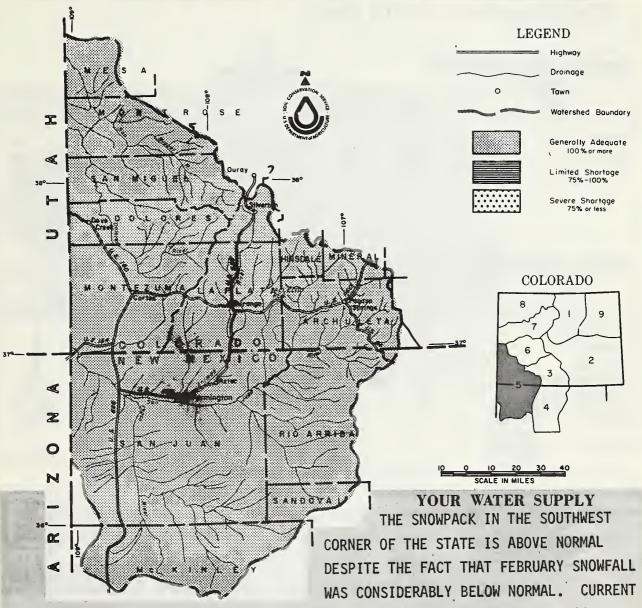


FIRST CLASS MA

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of March 1, 1973

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



SNOW RANGES FROM 131 PERCENT OF THE 1953-67 AVERAGE ON THE ANIMAS TO 144
PERCENT ON THE DOLORES. CARRY-OVER STORAGE IS CONSIDERABLY BETTER THAN NORMAL.
SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD AND
MOUNTAIN SOIL MOISTURE IS ABOVE NORMAL.

This report prepared by

JACK N. MASHICHEK and RONALO E. MORELANO
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
OENVER, COLORADO

M. O. BURDICK -- STATE CONSERVATIONIST MARION E. STRONG -- STATE CONSERVATIONIST ALBUQUERQUE. NEW MEXICO

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
KENNETH A. PITNEY—AREA CONSERVATIONIST OURANGO. COLORÂNO SANTA FE, NEW MEXICO

SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000)	Ac. Ft.)	Apr	-Sept
FORECAST POINT	FORE- CAST	% of Average	+ Average
Animas at Durango	525	128	409

290

220

195

490

800

28

126

117

113

120

129

129

231

194

163

379

619

24

WATER SUPPLY OUTLOOK	Expressed as "Poor, Fair, Average, E cellent" With Respect to Usual Suppl
----------------------	---------------------------------------------------------------------------

TATER SOTTET SOTESON CE	Flow P	
STREAM or AREA	Spring Season	Late Season
Florida Mancos San Miguel	Exc Exc Exc	Exc Exc Exc

(1) Observed flow plus change in storage in Vallicito Reservoir.

SUMMARY of SNOW MEASUREMENTS

(1) (Apr-Jul)

Dolores at Dolores

(1)

La Plata at Hesperus

Piedra Cr. at Piedra

San Juan at Carracas

Inflow to Navajo Res.

Los Pinos at Bayfield

COIL	140	ICTI	IDE
1102	MULL	IT2I	IKF.

RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF		
SUB-WATERSHED	Averaged	Last Year	Average 🕇	
Animas Dolores San Juan	6 4 5	131 144 139	133 140 128	

RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:		
	Stations	Last Year	Average †	
Animas Dolores San Juan	3 3 2	115 108 115	111 100 111	

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

0.555.010	Usable	Usable Storage			DECENTAL	Usable	Usable Storage			
RESERVOIR	Capacity	This Year	Last Year	Average †	RESERVOIR	Capacity	This Year	Last Year	Average	
Groundhog Lemon Navajo Vallecito Narraguinnep Jackson Gulch	22 40 1036 126	7 21 883 74 16 5	9 19 880 50	7 15 537 48						

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE



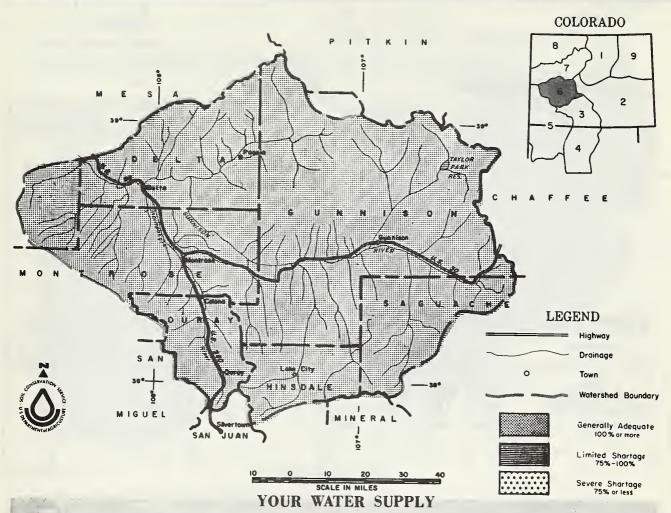
FIRST CLASS

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of

March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



STREAMFLOW FORECASTS ARE ABOVE AVERAGE ON ALL TRIBUTARIES IN THE GUNNISON DRAINAGE EVEN THOUGH SNOWFALL WAS BELOW AVERAGE DURING FEBRUARY. FORECASTS FOR THE APRIL THROUGH SEPTEMBER PERIOD RANGE FROM 102 TO 120 PERCENT. WITH AVERAGE SNOWFALL THE REMAINDER OF THE SEASON THE WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER. RESERVOIR STORAGE IN BLUE MESA AND MORROW POINT RESERVOIRS ARE ABOUT THE SAME AS LAST YEAR. TAYLOR PARK RESERVOIR CONTAINS 40,000 ACRE FEET COMPARED TO LAST YEAR'S 68,000 ACRE FEET.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT. SOIL CONSERVATION SERVICE

GÉNVER. COLORADO

M. O. BÜRGICK-STATE CONSERVATIONIST

U. S. DEPARTMENT OF A GRICULTURE - SOIL CONSERVATION SERVICE

DENVER. COLORADO

GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Ann-Sont WATER SIPPLY MILLIONE Expressed as "Poor, Fair, Average, Ex-

	FORE-	% of	+		Flow Period	
FORECAST POINT	CAST	Average	Average	STREAM or AREA	Spring Season	Late Seasor
Gunnison R. inflow to						
Blue Mesa Res. (1) Gunnison nr Gr.	780	102	767	Taylor	Exc	Avg
Junction (2)	1350	119	1137			
N. Fork of Gunnison (3)	300	117	257			
Surface Cr. nr						
Cedaridge	19	119	16			
Jncompahgre at Colona	155	120	129			

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs.
(3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YE	EARS)				
RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF			
SUB-WATERSHED	Averaged	Last Year	Average +		
Gunnison Surface Creek Uncompahgre	12 3 3	113 113 129	113 115 129		

SOIL MOISTURE

RIVER BASIN	Number of	THIS YEAR'S MOISTURE as PERCENT OF:		
	Stations	Last Year	Average	
Gunnison Surface Creek Uncompahgre	1 1	105 124 124	116 132 132	

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

DESERVOIR	DESERVOIS.	Usable	Us	able Stora	ige	\$5550,4010	Usable	U	sable Stora	age
RESERVOIR	Capacity	This Year	Last Year	Average	RESERVOIR	Capacity	This Year	Last Year	Average	
Blue Mesa Morrow Point Taylor	941 121 106	315 115 40	323 116 68	56						

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE SNOW SURVEY UNIT P.O. BOX 17107 DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, 5 300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE

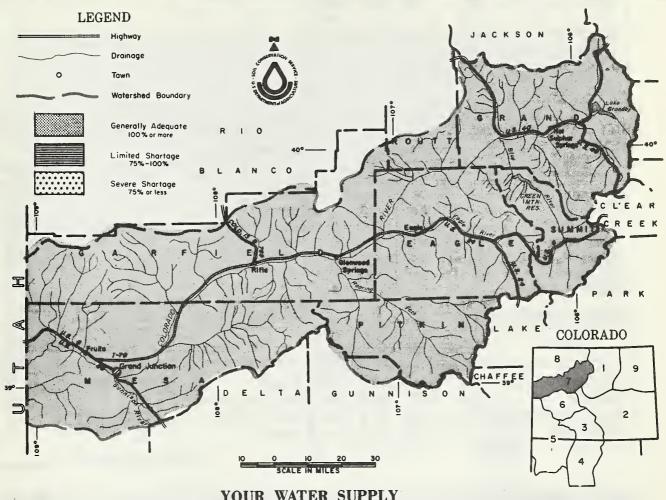


FIRST CLASS MA

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

March 1, 1973

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE LOWERED DUE TO THE MUCH BELOW NORMAL SNOWFALL DURING FEBRUARY. THE SUMMER FLOW OUTLOOK IS STILL RELATIVELY GOOD AND WATER SUPPLIES SHOULD BE ADEQUATE IF WE HAVE AT LEAST AVERAGE SNOWFALL FOR THE REMAINDER OF THE YEAR. CURRENT SNOWPACK RANGES FROM 84 PERCENT OF THE 15 YEAR AVERAGE ON WILLOW CREEK TO 113 PERCENT ON THE PLATEAU CREEK. MOUNTAIN SOILS ARE WET AND VALLEY IRRIGATORS REPORT SOILS IN GOOD CONDITION. CARRY-OVER STORAGE IS SLIGHTLY BETTER THAN AVERAGE.

This report prepared by JACK N. WASHICHEK and RONALD E. MORELAND SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE OENVER, COLORADO

M. D. BUROICK STATE CONSERVATIONIST R.L. PORTER AREA CONSERVATIONIST U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE OENVER, COLORADO GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

r		FORE-	% of	, +		Flow P	eriod
L	FORECAST POINT	CAST	Average	Average	STREAM or AREA	Spring Season	Late Season
	BlueR. inflow to Dillor Blue abv Gr. Mt. (1) Colo. Rv. inflow to	115 185	75 78	153 236	Brush Eagle River	Avg Avg	Fair Fair
	Granby Res. (2) Colo. Rv. nr Dotsero (3)	205 1350	94 98	219 1375	Gypsum Creek	Avg	Fair
	Roar.Fk. at G1. Spr. (4)	700	101	692			
	Wm Fk. nr Par. (5) Will. Cr. inflow to	60	100	60			
	Will. Cr. Res. Colo. nr Cameo (6)	42 2100	91 95	46 2216			

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow carrected far change in storage in Lake Granby as furnished by U.S.B.R. and diversians by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes os indicated in (1) (2) and (5) plus Moffat Ditch and change in Humestake, Williams Fark, Green Mt. and Willaw Creek Reservairs. (4) Observed flow plus diversians through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY OF SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

SOIL MOISTURE

RIVER BASIN and/or	Number of Courses		ER AS PERCENT OF RIVER BASIN of			THIS YEAR'	S MOISTURE
SUB-WATERSHED	Averaged	Last Year	Average +		Stations	Last Year	Average
Blue River Colorado Plateau Roaring Fork Williams Fork Willow	8 21 3 7 3 2	76 84 119 93 99 71	83 95 113 98 111 84	Blue River Colorado Roaring Fork Willow	1 5 1	119 122 134 107	114 112 150 103

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

IIIK	STORAGE (The	JUSANO AC.	PT.J	END OF MON
UIK	STUKAGE CUI	JUSANU AC.	TL.J	END OF M

DESERVOIR	Usable	U	Usable Storage		RESERVOIR	Usable		sable Stora	age
RESERVOIR Capacity This Last Year Year	Last Year	Average	RESERVOIR	Capacity	This Year	Last Year	Average †		
Dillon Granby Green Mountain Homestake	254 466 147 43	219 407 85 18	236 341 79 10	234 233 63 	Ruedi Williams Fork Willow Creek Vega	101 97 9 32	62 57 9 14	66 55 8 14	27 6 11

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE

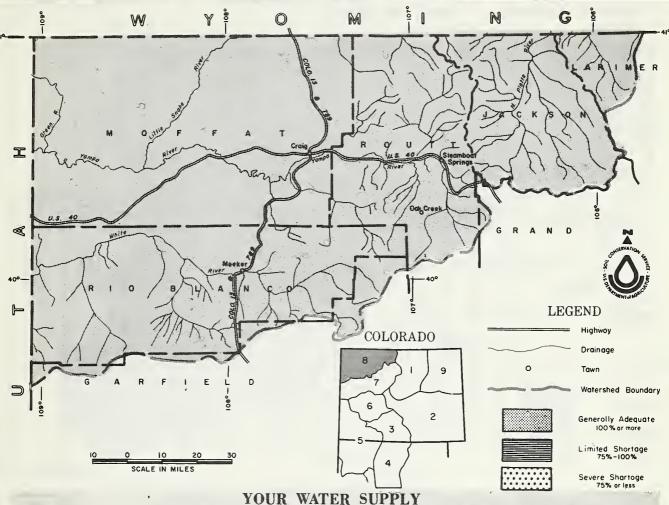


FIRST CLASS MA

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



SNOWPACK REMAINS NEAR NORMAL ON THE YAMPA, WHITE AND NORTH PLATTE WATERSHEDS. THE WHITE RIVER INDICATES 106 PERCENT OF THE 15 YEAR NORMAL AND HAS THE BEST SNOW IN THE AREA. FORECASTS FELL SLIGHTLY DURING THE MONTH DUE TO THE BELOW NORMAL SNOWFALL DURING FEBRUARY. IF SNOW CONTINUES TO FALL AT LEAST AT A NORMAL RATE WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER. ALTHOUGH COLD TEMPERATURES EXISTED DURING MOST OF THE MONTH, SOIL MOISTURE CONDITIONS REMAINED GOOD. MOUNTAIN SOIL MOISTURE STORAGE REMAINS ABOUT NORMAL FOR THIS TIME OF YEAR.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

M. D. BURDICK--STATE CONSERVATIONIST

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

DENVER, COLORADO

GLENWOOD'SPRINGS, COLORADO

STREAMFINW FORECASTS (1000 Ac Ft.) Apr-Sent

WATER SUPPLY	OUTLOOK	Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

SINEAMPLOW FOREGASIS (1000 F	10. 11.)	7.191	o c p c	WAIER SUPPLY UUILUUN cell	ent" With Respect	to Usual Supply
FORECAST POINT	FORE- CAST	% of Average	+ Average	STREAM or AREA	Flow P Spring Season	eriod Late Season
Elk at Clark Laramie at Jelm Little Snake at Lily No. Platte at Northgate White nr Meeker Yampa nr Maybell Yampa at Steamboat Springs	170 95 250 205 270 780 250	90 95 90 95 92 91 96	191 104 277 215 293 853 260	Canadian River Hunt Creek Illinois River Michigan River Oak Creek Trout Creek	Avg Avg Avg Avg Avg	Fair Fair Fair Fair Fair

CHAMBRY of SNOW MEASUREMENTS

SO	IL	M	01	ST	U	RI

RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF		RIVER BASIN	Number	THIS YEAR'S as PERC	S MOISTURE ENT OF:
SUB-WATERSHED	Averaged	Last Year	Average +		Stations	Last Year	Average '
Elk Laramie North Platte White Yampa	2 2 5 2 5	89 86 88 106 87	81 93 102 94 92	Laramie North Platte Yampa	2 2 1	102 100 107	93 116 103

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER. COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE

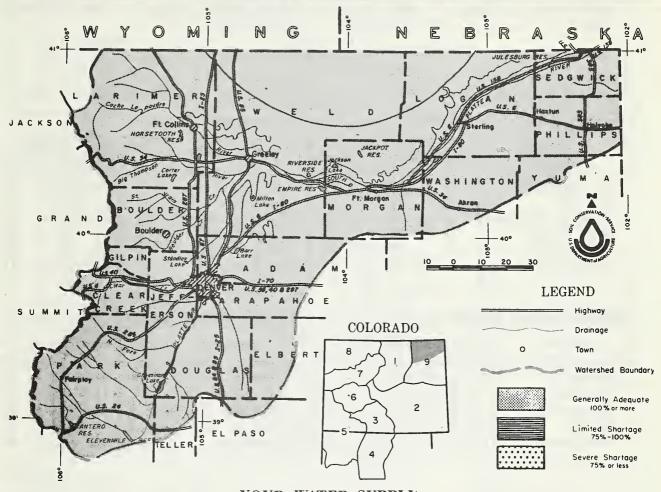


FIRST CLASS MAIL

WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of March 1, 1973

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE CSUSEXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL WAS LIGHT DURING FEBRUARY OVER THE ENTIRE SOUTH PLATTE DRAINAGE.

STREAMFLOW FORECASTS WERE DROPPED CORRESPONDINGLY. FORECASTS STILL INDICATE
NEAR NORMAL WATER SUPPLIES IF SNOWFALL IS NORMAL FOR THE REMAINDER OF THE
YEAR. RESERVOIR CARRY-OVER STORAGE IS STILL 117 PERCENT OF THE 15 YEAR
AVERAGE AND WILL PROVIDE EXCELLENT SUPPLEMENTAL SUPPLIES. SOIL MOISTURE
CONDITIONS IN THE IRRIGATED AREAS ARE EXCELLENT.

This report prepared by

JACK N. MASHICHEK AND RONALD E. MORÊLAND

SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE

OENVER, COLORADO

M. D. BURDICK --STATE CONSERVATIONIST

U. S. DEPARTMENT OF A GRICULTURE - SOIL CONSERVATION SERVICE

OENVER, COLORADO

STERLING; COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Ex-

THEATH FOR TOREDADIO (1000)	no. i (.)	7 12 1	CPC	WAILK SOULL COLLOCK CE	ient with Respect	t to Usual Supply.
	FORE-	% of	+		Flow P	eriod
FORECAST POINT	CAST	Average	Average	STREAM or AREA	Spring Season	Late Season
Big Thompson at Drake (1)	95	95	100	South Platte from Greeley to Ft.	Avg	Fair
Boulder at Orodell	48	98	49	Morgan		
Cache La Poudre at Canyon Mouth (2)	210	97	215	South Platte from Ft. Morgan to	Avg	Fair
Clear Cr. at Golden(3)	115	97	119	Sterling		
Saint Vrain at Lyons (4)	65	93	70	South Platte below Sterling	Avg	Fair

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF		
SUB-WATERSHED	Averaged	Last Year	Average +	
Big Thompson	5	83	94	
Boulder	3	76	86	
Cache La Poudre	8	97	108	
Clear Creek	5	86	78	
Saint Vrain	3	74	85	
South Platte	3	85	93	

RIVER BASIN	Number	THIS YEAR'S MOISTURE as PERCENT OF:		
	Stations	Last Year	Average	
Big Thompson	3	93	102	
Boulder	1	88	84	
Cache La Poudre	2	102	93	
Clear Creek	2	125	100	
Saint Vrain	2	94	89	
South Platte	2	126	117	

RESERVOIR STORAGE (Thousand Ac. Et.) END OF MONTH

MEDERTOIR STORAGE (Hougana	no. 1 (.)	END OF	MONTH		
RESERVOIR	Usable	Usable Storage				
RESERVOIR	Capacity	This Year	Last Year	Average		
Carter Cheesman Eleven Mile Empire Horsetooth	108.9 79.0 97.8 37.7 143.5	98.4 41.4 90.9 26.5 103.5	97.5 79.1 73.5 23.7 106.5	71.3 46.4 72.0 27.2 93.6		

RESERVOIR STORAGE (Thousand Ac. Et.) END OF MONTH

RESERVOIR STORAGE (THOUSAND AC. 14.7 END OF MONTH								
DESCRIPTION	Usable	Usable Storage						
RESERVOIR	Capacity	This Year	Last Year	Average #				
Jackson Julesburg Prewitt Point of Rocks Riverside	35.4 28.2 32.8 70.0 57.5	29.7 19.8 18.1 70.3 53.2	32.9 19.8 22.6 69.9 55.4	30.8 20.7 14.5 49.9 44.6				

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE



FIRST CLASS

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1973

SNUM COOKSE MEASUREM		RRENT INFO	RMATION	19/3	ECORO
SNOW COURSE	OATE	SNOW OEPTH (INCHES)	WATER CONTENT	WATER CONTE	
	SURVEY	(INCHES)	(INCHES)	LAST YEAR	53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill McIntyre	2/27 NS	37	10.9	13.4	12.6
Roach	2/26	51	14.3	16.0	14.4
North Platte River					
Cameron Pass	2/28	60	22.5	25.5	18.8
Columbine Lodge Northgate	2/27	51 27	16.1	23.1 3.3	19.6 5.3
Park View	2/26	31	7.7	7.8	7.2
Willow Cr. Pass (B)	2/26	35	8.8	10.7	9.8
SOUTH PLATTE BASIN					
Boulder Creek Baltimore	2/26	24	5.9	6.1	5.8
Boulder Falls	2/27	32	8.7	12.4	9.1
University Camp	2/27	40	11.5	15.7	15.6
Big Thompson River Deer Ridge	2/27	15	5.7	3.7	3.9
Hidden Valley	2/27	31	9.0	7.7	7.9
Lake Irene (B) Long's Peak	2/25 2/23	54 29	14.9	19.2 10.3	18.2 8.0
Two Mile	2/27	36	10.2	14.9	10.9
Cache La Poudre			_		
Bennett Creek Big South	2/24 2/26	26	6.7 2.4	6.2	2.4
Cameron Pass	2/28	60	22.5	25.5	18.8
Chambers Lake Deadman Hill	2/26 2/27	26 37	8.0 10.9	7.2 13.4	7.2 12.6
Hour Glass Lake	2/24	24	6.4	5.9	5.1
Joe Wright Lost Lake	2/28 2/26	55 32	18.2 8.7	18.9	9.6
Pine Creek	2/27	12	2.9	1.1	1.6
Red Feather	2/27	21	6.2	5.2	5.6
Clear Creek Baltimore (B)	2/26	24	5.9	6.1	5.8
Berthoud Falls	2/26	36	9.6	11.8	11.5
Empire Grizzly Peak (B)	2/26	17 37	4.3 9.5	5.1 15.5	6.0
Loveland Lift	2/27	45	12.8	9.2	17.7
Loveland Pass	2/27	39	10.1	12.9	12.3
Saint Vrain River	2/27	14	4.3	r 1	2 7
Copeland Lake Ward	2/27	21	4.1 4.9	5.1 4.4	3.7 4.8
Wild Basin	2/27	25	6,4	11.2	9.7
South Platte River	2/27	25	7 7	0 2	
Geneva Park	2/28	18	7.1 3.9	8.3	3.1
Horseshoe Mt.	2/26	29 32	6.6	11.9	
Hoosier Pass Jefferson Creek	2/27	27	8.5 7.1	11.3	10.5
Mosquito	2/27	25	6.7	11.3	
Trout Creek Pass ARKANSAS BASIN	2/26	21	4.6	6.2	
Arkansas River					
Bigelow Divide	2/23	27	4.9	2.3	4.8
Cooper Hill (B) East Fork	2/26	32 26	7.4	8.7	8.5
Four Mile Park	2/28	19	5.9 4.3	8.2 5.7	7.6 4.6
Fremont Pass	2/28	38	10.2	12.6	12.4
Garfield Hermit Lake	2/27 2/26	39	12.5	11.0	11.4
Monarch Pass	2/27	45	14.4	14.3	14.3
Tennessee Pass Twin Lakes Tunnel	2/27 2/27	29	7.7 6.0	9.8	8.5
Westcliffe	2/26	29	6.4	5.8	5.7

	CUE	RENT INFOR	RMATION	PAST R	ECORD
	DATE			WATER C	
SNOW COURSE	OF SURVEY	SNOW OEPTH (INCHES)	WATER CONTENT (INCHES)	LAST	AVG. 53 67
Cucharas River Blue Lakes Cucharas Pass LaVeta Pass (B)	2/26 2/26 2/26	11 29 34	3.6 8.0 7.3	0.0 4.4 8.4	3.5 7.8
Purgatorie River Bourbon RIO GRANDE BASIN-COLO	2/26	30	6.8	5.0	6.4
Alamosa River Silver Lakes Summitville	2/23 2/26	37 62	9.8 21.2	2.2 16.1	5.5 14.6
Conejos River Cumbres LaManga Platoro River Springs	3/2 3/2 2/27 2/27	53 60 54 27	19.0 19.6 17.8 7.6	12.8 12.3 12.8 2.0	16.5 13.8 5.8
Culebra River Brown Cabin Cottonwood (B) Culebra LaVeta Pass (B) Trinchera (B)	2/27 2/27 2/26 2/26 3/2	28 29 37 34 32	6.9 6.9 9.3 7.3 8.6	4.1 9.0 8.4 7.8	7.3 7.8
Rio Grande Cochetopa Pass Grayback Hiway Lake Humphrey Love Lake Pass Creek Pool Table Porcupine Santa Maria Upper Rio Grande Wolf Creek Pass Wolf Cr. Sum. (B)	2/26 2/26 2/27 2/22 2/27 2/27 2/28 2/27 2/28 2/29 2/29	26 54 70 33 41 47 27 36 25 37 74 85	5.8 17.4 26.2 7.6 11.6 16.0 5.7 8.2 5.0 10.2 27.5 31.7	7.4 10.2 10.5 6.4 11.6 4.2 10.5	4.5 21.4 6.2 10.8 5.9 8.7 4.4 6.6 22.9 22.1
RIO GRANDE BASIN-NM Pecos River Panchuela	2/26	24	5.8	1.4	3.2
Rio Chama Bateman Capulin Chama Divide Chamita	2/26 3/1 2/26 2/27	40 21 21 33	11.0 4.7 5.1 8.7	6.8 2.2 0.5 4.3	9.4 3.9 3.6 7.9
Rio Grande Aspen Grove Big Tesuque Blue Bird Mesa Cordova Elk Cabin Hopewell La Cueva Pajarito Peak Payrole Quemazon Rio En Medio Sandoval Taos Canyon Teakettle Tres Ritos	2/21 2/20 2/28 2/28 2/23 2/27 2/26 3/1 2/26 2/22 2/20 2/23 2/23 2/28 3/1	29 32 14 38 27 47 26 12 34 39 43 26 23 35 28	7.7 9.6 4.1 8.3 6.4 15.0 7.3 2.3 9.5 9.7 13.2 6.2 6.4 9.3 7.7	4.8 0.0 5.4 6.8 6.3 5.1 1.6	5.2 4.6 4.7 9.7 3.3 3.9 1.5 7.8 7.7 7.9 5.0 4.4 4.8
Rio Hondo Twinning	2/23	32	8.7	4.7	
Red River Hematite Park (B) Red River	2/22 2/22	22 24	6.0 6.3	2.6 5.7	3.7 5.2

NOTE: NS - No Survey
(B) - On adjacent drainage

APPENDIX I

	Cui	SNOW COURSE MEASUREMENTS as of March 1, 1973					
	OATE SNOW			PAST RECORD WATER CONTENT (INCHES)			
SNOW COURSE	SURVEY	OEPTH (INCHES)	WATER CONTENT (INCHES)	LAST	AVG 53 67		
AN JUAN-DOLORES BASIN Animas River Cascade Lemon Mineral Creek Molas Lake Purgatory Red Mt. Pass (B) Silverton Sub-Sta	2/27 2/26 2/27 2/27 2/27 2/27 2/27	42 37 49 44 67 80 35	13.8 22.9 29.9 10.6	6.5 11.7 10.4 19.1 25.8 6.7	10.2 11.7 11.0 23.5 5.6		
Spud Mountain Dolores River Lizzard Head Lone Cone Rico Telluride Trout Lake	2/27 2/27 2/27 2/27 2/28 2/28	51 46 34 31 45	16.5	13.3 13.0 5.8 6.4 9.5	19.5 12.6 6.8 5.9 10.7		
San Juan River Chama Divide (B) Chamita (B) Upper San Juan Wolf Cr. Pass (B) Wolf Cr. Summit	2/26 2/27 2/27 2/29 2/29	21 33 84 74 85	5.1 8.7 32.3 27.5 31.7	21.2	3.6 7.9 25.2 22.9 22.1		
Gunnison River Alexander Lake Blue Mesa Butte Cochetopa Pass (B) Crested Butte Keystone Lake City Mesa Lakes (B) McClure Pass Park Cone Park Reservoir Porphyry Creek Tomichi	2/27 2/28 2/28 2/26 2/27 2/27 2/23 2/27 2/26 2/26 2/27 2/27	61 32 38 26 43 56 30 50 50 31 66 49 38	7.3 10.5 5.8 11.1 18.3 7.1 16.2 16.7 7.3	15.4 6.8 13.1 14.7 8.9 18.1 11.0	3.5		
<u>Surface Creek</u> Alexander Lake Mesa Lakes (B) Park Reservoir	2/27 2/27 2/27	61 50 66	19.4 16.2 22.0	13.1	17.0 13.4 19.6		
Uncompahgre River Tronton Park Red Mountain Pass Telluride (B) COLORADO BASIN	2/28 2/27 2/28	41 80 31	12.2 29.9 9.3		10.4 23.5 5.9		
Blue River Blue River Fremont Pass Frisco Grizzly Peak Hoosier Pass (B) Shrine Pass Snake River Summit Ranch	2/28 2/28 2/26 2/26 2/28 2/26 2/26 2/27	29 38 23 37 32 46 43 23	7.2 10.2 4.9 9.5 8.5 12.9 4.8 5.0	6.3 15.5 11.3	7.3 12.4 6.3 13.4 10.5 13.6 6.7 6.0		

	CURRENT INFORMATION PAST R			ECURO	
SNOW COURSE	OATE OF	OF DEPTH CONTENT			ONTEN HES)
	SURVEY	(INCHES)	(INCHES)	YEAR	53 67
Colorado River Arrow Berthoud Pass Berthoud Summit Cooper Hill	2/27 2/27 2/26 2/26	34 43 48 32	10.7 12.0 13.1 7.4		9.3 11.6 14.8 8.5
Fiddler Gulch Glenmar Ranch Gore Pass Grand Lake Lake Irene Lapland Lulu Lynx Pass McKenzie Gulch Middle Fork Milner North Inlet Pando Phantom Valley Ranch Creek Tennessee Pass (B) Vail Pass	NS 2/26 2/27 2/25 2/26 2/27 2/27 2/26 2/25 2/25 2/25 2/25 2/25 2/25 2/27 2/27	30 29 30 54 27 47 36 26 31 37 32 27 32 27 30 29 42 35	7.2 7.8 6.0 14.9 7.4 13.8 10.1 5.5 7.8 9.5 8.0 7.1 8.0 7.7 12.0 8.5	8.4 9.6 8.1 19.2 10.3 16.9 11.0 7.2 7.5 11.7 7.9 9.2 7.7 8.1 9.8 15.5 11.6	6.4 8.4 6.6 18.2 8.6 13.2 10.0 4.8 7.5 11.1 7.4 7.9 8.5 7.1 8.5 14.0 9.5
Roaring Fork River Aspen Chapman Independence Pass Ivanhoe Kiln Last Chance Lift McClure Pass Nast North Lost Trail	2/26 2/27 2/27 2/27 2/27 2/27 2/26 2/26	42 40 40 48 37 32 42 50 25 45	12.2 10.0 11.2 14.6 9.3 8.9 10.8 16.7 6.1	14.6 12.7 15.3 11.9 10.4 13.9 14.7 5.5	13.0 13.9 13.8 13.8 14.6 5.2 13.0
Williams Fork River Glenmar Ranch Jones Pass Middle Fork	2/26 2/27 2/26	30 42 31	7.2 12.4 7.8	8.4 11.7 7.5	6.4 10.9 7.5
Willow Creek Granby Willow Creek Pass	2/26 2/26	22 35	4.5 8.8	8.0 10.7	6.1 9.8
Plateau Creek Mesa Lakes Park Reservoir Trickle Divide	2/27 2/27 2/27	50 66 69	16.2 22.0 22.8		13.4 19.6 21.1
YAMPA BASIN Elk River Clark Elk River Hahn's Peak	2/28 2/28 2/28	37 45 40	9.0 12.8 9.3	8.6 16.0 11.3	11.5 15.5
Yampa River Bear River Buffalo Pass Columbine Lodge (B) Dry Lake Lynx Pass (B) Rabbit Ears Yampa View	NS 2/26 2/27 2/26 2/27 2/27 2/27	96 51 51 36 59 39	29.8 16.1 16.3 10.1 19.5 12.1	16.5 11.0 22.3	19.6 17.6 10.0 21.2 12.3
White River Burro Mountain Rio Blanco	2/27 2/26	48 42	15.1	13.0	15.2 12.9

NOTE:

NS - No Survey (B) - On Adjacent Drainage

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass Willow Pass	11/8/72 10/25/72	11.1 9.5	7.7 7.5	6.8 8.3	6.4 6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/1/72	6.9	3.1	3.5	3.7
Big Thompson River					
Beaver Dam Guard Station Two Mile	10/1/72 10/1/72 10/1/72	7.1 6.9 9.1	4.5 3.2 5.3	5.3 3.2 5.5	3.8 3.4 5.5
Clear Creek					
Clear Creek Hoop Creek	12/28/72 10/25/72	9.5 4.9	7.1 2.8	5.3 2.6	7.1 2.9
Cache La Poudre River					
Feather Laramie Road	10/1/72 10/1/72	10.1 12.4	4.5 6.9	4.7 6.5	4.5 7.8
South Platte River					
Hoosier Pass Kenosha Pass	10/25/72 10/25/72	7.8 4.4	5.5 3.3	4.4 2.6	4.9 2.6
ARKANSAS BASIN					
Arkansas River					
Garfield Leadville Twin Lakes Tunnel	10/18/72 10/16/72 10/16/72	6.7 7.8 4.5	5.0 4.0 2.4	4.2 3.4 0.9	3.9 4.2 2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/9/72	10.7	4.6	5.0	5.5
Rio Grande					
Bristol View LaVeta	11/10/72 11/9/72	6.1 11.9	4.1 6.9	3.1 7.1	3.9 7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman Chamita	2/27/73	6.7 8.0	7.0	4.2 4.1	3.2 4.1
Rio Grande					
Aqua Piedra Big Tesuque Rio En Medio Taos Canyon	2/26/73 2/28/73 2/27/73 2/23/73	7.2 3.7 3.5 3.3	5.2 3.5 2.8 2.2	4.2 2.5	3.7 1.9 1.2 2.3
Red River					
Red River Summit	2/22/72	4.8	1.5	2.4	1.9

SOIL MOISTURE MEASUREMENTS as of March 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade Mineral Creek Molas Lake	11/8/72 11/8/72 11/8/72	9.1 5.7 9.4	7.2 3.2 5.8	5.5 3.1 5.5	6.3 3.7 4.6
Dolores River					
Dolores Lizzard Head Rico	11/1/72 11/1/72 11/1/72	19.6 11.8 13.8	11.4 4.1 9.3	10.6 3.9 8.5	6.7 8.3 9.9
GUNNISON BASIN					
Gunnison River					
King	10/18/72	3.3	2.2	2.1	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	10/25/72	4.2	3.2	2.7	2.8
Colorado River					
Berthoud Pass Gore Grand Mesa Ranch Creek Vail	10/25/72 10/31/72 11/2/72 10/25/72 12/28/72	3.9 4.9 12.5 8.7 12.3	3.2 3.1 12.3 5.4 6.9	2.5 3.3 9.9 4.7 4.9	2.8 2.5 9.3 6.0
Roaring Fork	12, 23, 72	12.0	0.5		
Placita	11/8/72	9.3	7.8	5.8	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/8/72	19.0	12.1	11.3	11.8
,					:

ALL PROFILES 4 FEET DEEP

JOB SCY PORTLAND DOEG 1967 MOLLIMAS

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service Soil Conservation Service

Department of Interior

Bureau of Reclamation Geological Survey National Park Service Indian Service

Department of Commerce

NOAA, National Weather Service

Defence Department

Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company Public Service Company of New Mexico

MUNICIPALITIES

City of Denver City of Greeley
City of Boulder City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompandere Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, 5300

POSTAGE AND FEES PAID U. S. DEPARTMENT OF AGRICULTURE AGR-101



FEDERAL - STATE - PRIVATE

COOPERATIVE SNOW SURVEYS

Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"